

Realizing an Armed Unmanned Ground System DoD Capability

DoD Need – There is no recognized DoD requirement other than FCS (Very large)

Challenge – Fielding a “natural extension of the soldier/marines reach on the battlefield”

Opportunity – Change the nature of combat by providing US forces an overmatch capability

Status of Armed Unmanned Ground System Development

The good news for every soldier and marine in combat today!



Concept of Operations (CONOPS)

Lethality

Serves as a natural extension of the soldier/marine in battle

- **Remotely over watch** suspected ambush/IED locations > day/night and all weather with no mission degradation due to mental fatigue or weather
- **“Point man”** during squad recon/movement to contact
- **“First in”** to buildings or doors suspected on being booby trapped/IED/direct fire
- **“Escalation”** capable – Non-lethal, Less than lethal, lethal all on one platform

Concept of Operations (CONOPS) Force Protection

Preserving the force and other high value assets to fight another day

- Serves as the “unblinking eye”, day and night to guard Forward Operating Bases (FOB), Fire bases, expeditionary airfields, and logistics supply points or ammunition dumps remotely – paired with other unattended ground sensors
- Serves as an over watch element or “first station” in a personnel or vehicle check point to provide stand off against suicide bombers
- Force multiplier – by “adding” technical capability to stand guard you significantly decrease human requirement – allow soldiers/marines to rest or prepare for next mission instead of guard duty

Concept of Operations (CONOPS)

Situational Awareness

Projecting sensors to significantly increase combat effectiveness

- Provides sensor “stand-off” for the operator creating “tactical patience” that allows more deliberate fire/no-fire decisions
- Using on-board laser range finder, platform allows you to accurately target combatants with both direct and indirect means
- Eyes, ears and mouth - Utilizing the five on-board camera systems, and loudhailer the platform acts as another remote sensor on the battlefield

The Future is Bright and..... Full of Challenges

- Rules of Engagement (ROE)
- Requirements
- System Integration
 - Existing manned and unmanned systems
 - Common Operational systems
 - C3I systems
- Concept of Operations and Tactics, techniques and procedures (TTP) development